

ATTORNEY DOCKET NO. 05015.0365U1
APP. SERIAL NO. 09/662,965

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (canceled)
2. (currently amended) The method of ~~claim 1~~ claim 29 wherein the terpene-phenol resin comprises from about 1 to about 40 % by weight of phenol as measured by weight of the compound.
3. (currently amended) The method of claim 1-~~claim 1~~ claim 29 wherein the terpene-phenol resin comprises from about 5 to about 20 % by weight of phenol as measured by weight of the compound.
4. (currently amended) The method of ~~claim 1~~ claim 29 wherein the phenol-containing compound is present in the biodegradable polymer or biodegradable polymer composition at from about 0.5 to about 10 weight % as measured by the total weight of the biodegradable polymer or biodegradable polymer composition.
5. (currently amended) The method of ~~claim 1~~ claim 29 wherein the phenol-containing compound is present in the biodegradable polymer or biodegradable polymer composition at from about 1 to about 3 weight % as measured by the total weight of the biodegradable polymer or biodegradable polymer composition.
6. (canceled)
7. (currently amended) The method of ~~claim 1~~ claim 29 wherein ~~the biodegradable polymer or biodegradable polymer composition comprises~~ the aliphatic-aromatic copolyester and wherein R^{11} and R^{12} are the same or different, and are selected from the group consisting of residues of

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one or more of diethylene glycol, propylene glycol, 1,3-propanediol, 1,3-butanediol, and 1,4-butanediol, R^{13} is selected from the group consisting of malonic acid, succinic acid, glutaric acid, adipic acid, pimelic acid, 2,2-dimethyl glutaric acid, diglycolic acid, and an ester forming derivative thereof, and R^{14} is selected from the group consisting of one or more of 1,4-terephthalic acid, 1,3-terephthalic acid, 2,6-naphthoic acid, 1,5-naphthoic acid, and an ester forming derivative thereof.

8. (canceled)

9. (currently amended) The method of ~~claim 1~~ claim 29, wherein the biodegradable polymer or biodegradable polymer composition comprises one or more of: a pigment, a dye, an opacifying agent, an antioxidant, an ultraviolet stabilizer, an optical brightener, an aliphatic acid, a metal salt, an antistatic agent, an antiblocking aid, a filler, a dispersing agent, a coating aid, a slip agent, a lubricant, starch, wood, and flour.

10. - 23. (canceled)

24. (currently amended) The biodegradable polymer composition of ~~claim 22~~ claim 30 wherein ~~the biodegradable polymer or biodegradable polymer second material composition comprises the aliphatic-aromatic copolyester and wherein~~ R^{11} and R^{12} are the same or different, and are selected from the group consisting of residues of one or more of diethylene glycol, propylene glycol, 1,3-propanediol, 1,3-butanediol, and 1,4-butanediol, R^{13} is selected from the group consisting of malonic acid, succinic acid, glutaric acid, adipic acid, pimelic acid, 2,2-dimethyl glutaric acid, diglycolic acid, and an ester forming derivative thereof, and R^{14} is selected from the group consisting of one or more of 1,4-terephthalic acid, 1,3-terephthalic acid, 2,6-naphthoic acid, 1,5-naphthoic acid, and an ester forming derivative thereof.

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25. (currently amended) The biodegradable polymer composition of ~~claim 22~~ claim 30 wherein the phenol-containing compound comprises from about 1 to about 40 % by weight of phenol as measured by weight of the compound.

26. (currently amended) The biodegradable polymer composition of ~~claim 22~~ claim 30 wherein the phenol-containing compound is present in the biodegradable polymer composition in amount of from about 0.5 to about 10 weight % as measured by weight of the biodegradable polymer composition.

27. (currently amended) The biodegradable polymer composition of ~~claim 22~~ claim 30 wherein the phenol-containing compound is present in the biodegradable composition in an amount of from about 1 to about 3 weight % as measured by weight of the biodegradable polymer composition.

28. (currently amended) The biodegradable polymer composition of ~~claim 22~~ claim 30, further comprising one or more of a pigment, a dye, an opacifying agent, an antioxidant, an ultraviolet stabilizer, an optical brightener, an aliphatic acid, a metal salt, an antistatic agent, an antiblocking aid, a filler, a dispersing agent, a coating aid, a slip agent, a lubricant, starch, wood, and flour.

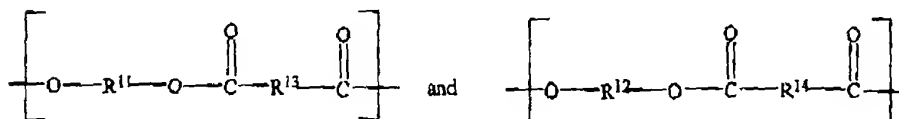
29. (new) A method for preparing an article from a biodegradable polymer composition wherein the method comprises:

- a. introducing a phenol-containing compound comprising terpene-phenol resin into a biodegradable polymer or biodegradable polymer composition in an amount sufficient to slow the degradation rate of the biodegradable polymer or biodegradable polymer composition; and
- b. mixing the phenol-containing compound with the biodegradable polymer or biodegradable polymer composition;

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wherein the biodegradable polymer or biodegradable polymer composition consists essentially of:

an aliphatic-aromatic copolyester having repeat units of the following structures:



wherein

- (i) R^{11} and R^{12} are the same or different, and are residues of one or more of diethylene glycol, propylene glycol, 1,3-propanediol, 2,2-dimethyl-1,3-propanediol, 1,3-butanediol, 1,4-butanediol, 1,5-pentanediol, 1,6-hexanediol, 2,2,4-trimethyl-1,6-hexanediol, thiodiethanol, 1,3-cyclohexanedimethanol, 1,4-cyclohexanedimethanol, 2,2,4,4-tetramethyl-1,3-cyclobutanediol, triethylene glycol, or tetraethylene glycol;
- (ii) R^{11} and R^{12} are 100% of the diol components in the copolyester;
- (iii) R^{13} is absent or is selected from one or more of the groups consisting of C_1 - C_{12} alkylene or oxyalkylene; C_1 - C_{12} alkylene or oxyalkylene substituted with one to four substituents independently selected from the group consisting of halo, C_6 - C_{10} aryl, and C_1 - C_4 alkoxy; C_5 - C_{10} cycloalkylene; and C_5 - C_{10} cycloalkylene substituted with one to four substituents independently selected from the group consisting of halo, C_6 - C_{10} aryl, and C_1 - C_4 alkoxy; and
- (iv) R^{14} is selected from one or more of the groups consisting of C_6 - C_{10} aryl, and C_6 - C_{10} aryl substituted with one to four substituents independently selected from the group consisting of halo, C_1 - C_4 alkyl, and C_1 - C_4 alkoxy; and

- c. forming the biodegradable polymer composition into an article, wherein the article comprises: a film, a bottle, a blow molded article, an injection molded article or a container, and wherein the article exhibits a delayed biodegradation

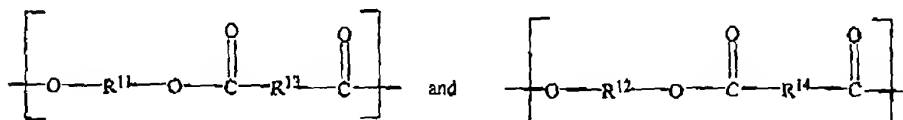
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rate over an article formed from a biodegradable polymer composition not including the phenol-containing compound.

30. (new) A biodegradable polymer composition for making an article comprising a film, a bottle, a blow molded article, an injection molded article or a container, wherein the biodegradable polymer or biodegradable polymer-second material composition comprises:

- a. a phenol-containing compound comprising terpene-phenol resin incorporated in the biodegradable polymer or biodegradable polymer-second material composition, the phenol-containing compound being present at an amount sufficient to slow the degradation rate of the biodegradable polymer or biodegradable polymer second-material composition; and
- b. a biodegradable polymer or biodegradable polymer-second material composition consisting essentially of:

an aliphatic-aromatic copolyester having repeat units of the following structures:



wherein

- (i) R^{11} and R^{12} are the same or different, and are residues of one or more of diethylene glycol, propylene glycol, 1,3-propanediol, 2,2-dimethyl-1,3-propanediol, 1,3-butanediol, 1,4-butanediol, 1,5-pentanediol, 1,6-hexanediol, 2,2,4-trimethyl-1,6-hexanediol, thiodiethanol, 1,3-cyclohexanedimethanol, 1,4-cyclohexanedimethanol, 2,2,4,4-tetramethyl-1,3-cyclobutanediol, triethylene glycol, or tetraethylene glycol;
- (ii) R^{11} and R^{12} are 100% of the diol components in the copolyester;
- (iii) R^{13} is absent or is selected from one or more of the groups consisting of C_1 - C_{12} alkylene or oxyalkylene; C_1 - C_{12} alkylene or oxyalkylene substituted with one to four substituents independently selected from the group

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consisting of halo, C₆ - C₁₀ aryl, and C₁ - C₄ alkoxy; C₅ - C₁₀ cycloalkylene; and C₅ - C₁₀ cycloalkylene substituted with one to four substituents independently selected from the group consisting of halo, C₆ - C₁₀ aryl, and C₁ - C₄ alkoxy; and

- (iv) R¹⁴ is selected from one or more of the groups consisting of C₆ - C₁₀ aryl, and C₆ - C₁₀ aryl substituted with one to four substituents independently selected from the group consisting of halo, C₁ - C₄ alkyl, and C₁ - C₄ alkoxy;

and wherein the article exhibits a delayed biodegradation rate over an article formed from a biodegradable polymer composition not including the phenol-containing compound.